

Title (en)

Pumping device for a fluid product, particularly liquid or pasty, and dispenser for such a device.

Title (de)

Pumpvorrichtung für ein fließfähiges, insbesondere pastöses und/oder flüssiges Produkt und Spender mit einer solchen Pumpvorrichtung.

Title (fr)

Dispositif de pompage pour un produit fluide, en particulier pâteux ou liquide, et distributeur pourvu d'un tel dispositif.

Publication

**EP 0452260 B1 19950104 (DE)**

Application

**EP 91810235 A 19910402**

Priority

CH 120090 A 19900409

Abstract (en)

[origin: EP0452260A2] A dispenser (401) has a pumping device (411) which has a support (413) with a plate-shaped support part (413a), a pump element (411) which can be pressed manually against the latter and at least one pump chamber (439). The latter is connected by means of an outlet valve (437) to the side of the pump element (431) which is accessible from the outside. The pump element (431) and the outlet valve (437) are formed by an elastic diaphragm (433a) which has an outlet hole (433c), and by an essentially dimensionally stable disc (435) which is connected to said diaphragm. When the pump element (431) is non-operative the outlet valve (437) is closed, in which case at most a very small amount of the product to be stored which is present in any case in the outlet hole (433c) can come into contact with the ambient air. If a person manually presses the pump element (431) against the aforesaid support part (413a), the product (451) to be dispensed opens the outlet valve (437). <IMAGE>

IPC 1-7

**B05B 11/00; A47K 5/12**

IPC 8 full level

**B05B 11/00** (2006.01); **B65D 47/34** (2006.01)

CPC (source: EP US)

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Citation (examination)

EP 0363307 A1 19900411 - PLASCO SA [FR]

Cited by

EP0520315A1; EP0682540A4; FR2809776A1; US5492252A; EP0649684A3; EP0600286A3; EP1344570A3; FR2926068A1; US5927567A; EP0751077A1; US5813573A; FR2711620A1; EP0649795A3; EP0673852A1; FR2969935A1; US6016974A; US5862955A; EP0565977A3; EP0810160A3; EP0867232A3; US5611463A; CN104144622A; EP2820969A4; CN108348111A; WO9727121A1; WO2009112659A1; WO0191913A1; US9446424B2; US6673295B1; US7041246B2; WO9630126A1; WO2012093222A1

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